



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

In re Application of

Juergen Schroeder, et al.

Serial No. 10/505,163

Filed: August 30, 2004

For: Cleaning of tray columns which have been used for rectificatively treating liquids comprising (meth)acrylic acid and/or esters

DECLARATION

I, Volker Diehl, Dr. rer. nat., a citizen of Germany and residing at 67158 Ellerstadt, Portugieserring 43, Germany, declare as follows:

I am a fully trained chemist, having studied chemistry at the University of Saarbrücken, Germany, from 1965 to 1972.

I was awarded my doctor's degree by the University of Saarbrücken, Germany, in 1975.

I joined BASF Aktiengesellschaft of 67056 Ludwigshafen, Germany, in 1977 and have since then preponderantly worked in production of acrylic monomers.

I'm one of the inventors of Ser.No. 10/505,163.

I have carefully read the Official Actions issued by now. In order to prove the superiority of a process for cleaning tray columns which have been used for rectificatively treating liquids comprising (meth)acrylic monomers which cleaning process employs passing a gas through the tray column in countercurrent to a basic liquid at a pressure loss in the gas phase of from 0.5 to 5 mbar per tray, I would like

to make to following statements:

1. On page 7, line 31 of Ser.No. 10/505,163 I have become aware of an obvious error, as the "600 m³/h of air at ambient temperature" in said line 31 correctly have to read "16,000 m³/h"
2. In addition to the Example and Comparative Example of Ser. No. 10/505,163 the following experiments were carried out under my supervision:

A) The Example of Ser. No. 10/505,163 was repeated under using the same tray column which had an opening ratio of 12.5 %. However over the entire duration of the sodium hydroxide solution flushing, instead of 16,000 m³/h only 7,500 m³/h of air at ambient temperature was fed to the column below the first tray, which caused an average gas phase differential pressure over all trays of 1 mbar/tray instead of 2mbar/tray. After the end of the flushing inspection of the tray column resulted in a polymer remainder of less than 5 kg in total.

B) The Example of Ser. No. 10/505,163 was repeated under using the same tray column which had an opening ratio of 12.5 %. However over the entire duration of the sodium hydroxide solution flushing, instead of 16,000 m³/h 49,500 m³/h of air at abient temperature was fed to the column below the first tray, which caused an average gas phase differential pressure of 10 mbar/tray instead of 2 mbar/tray. After the end of the flushing inspection of the tray column resulted in a polymer remainder of more than 50 kg in total.

Through an increase of the average gas phase differential pressure to values above 10 mbar/tray as recommended in WO 01/51159 the aforesaid amount of polymer remainder could not be diminished.

Above results could not have been foreseen by the skilled artisan and reflects the unobviousness of the invention claimed in Ser. No. 10/505,163 versus the

closest state of the art.

The undersigned declares further that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

Signed at 67056 Ludwigshafen, Germany, this 9th day of November 2006.

A handwritten signature in black ink, appearing to be 'W. H. L.', written over a horizontal line.

Signature of Declarant